Product Overview

Centrifuges & Systems
Pharmaceutical Industry

**Vertical Basket Centrifuges**
V 300 – 500 TP
0.14 – 0.50 m² filter area
3.9 – 31.5 L nominal volume

**Horizonatal Peeler Centrifuges**
H 300 – 500 P
0.12 – 0.39 m² filter area
4.9 – 20 L nominal volume

**Top Discharge Centrifuges**
V 630 – 1250 TP
0.80 – 3.14 m² filter area
51 – 400 L nominal volume

**Vertical Peeler Centrifuges**
V 800 – 1250 BP
1.58 – 3.14 m² filter area
100 – 400 L nominal volume

**Horizontal Peeler Centrifuges**
H 630 – 1250 P
0.62 – 3.14 m² filter area
42 – 400 L nominal volume

**Inverting Filter Centrifuges**
F1 – F4
HF 300.1 – 1300.1
0.10 – 2.00 m² filter area
10 – 1500 kg/h capacity

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**Key benefits:**
- mobile, compact design
- easy “plug and use” installation
- ideal for scaling-up
- very simple handling
- CIP cleaning
- can be installed in separator housing/glove box

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**Key benefits:**
- compact design
- easy “plug and use” installation
- cGMP compliant
- fully automated operation
- ideal for scaling-up

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**Key benefits:**
- flexible adaptation for moderately well filtering products
- manual discharge of filter cake
- gentle discharge, no particle damage
- automated CIP cleaning
- easy access to all product contact parts

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**Key benefits:**
- small foot print
- cGMP compliant
- process housing opens and closes automatically
- automated product discharge
- automated CIP cleaning
- easy access to all product contact parts

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**Key benefits:**
- wide range of applications
- meets highest cGMP standards
- fully automated and validated CIP cleaning
- all process parts accessible for inspection
- cleanroom design

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**Key benefits:**
- for moderately well filtering products
- complete discharge
- safe discharge
- additional pressure for maximum dewatering
- centrifuge can be used for drying
- small foot print
- very simple through-the-wall installation
**Key benefits:**
- excellent adaptability to changing products
- high throughputs
- separation by filtration or sedimentation
- better cake discharge due to gravity assist
- cartridge bearing and small foot print

**Key benefits:**
- very compact design
- choice of tabletop or portable design
- easy "plug and use" installation
- ideal for scaling-up
- fully automated operation

**Vertical Basket Centrifuges**
V 300 – 500 TC
0.14–0.50 m² filter area
3.9–31.5 L nominal volume

**Vertical Peeler Centrifuges**
V 800 – 1800 BC
1.58–7.07 m² filter area
100–1350 L nominal volume

**Horizontal Basket Centrifuges**
V 500 – 1250 TC
0.50–3.14 m² filter area
31.5–400 L nominal volume

**Horizontal Peeler Centrifuges**
H 630 – 1800 C
1.58–7.07 m² filter area
63–1300 L nominal volume

**Key benefits:**
- mobile, compact design
- easy "plug and use" installation
- ideal for scaling-up
- double jacket for heating and cooling
- baskets for basic filtering, sedimentation, classifying and clearing tests

**Key benefits:**
- mobile, compact design
- easy "plug and use" installation
- ideal for scaling-up
- double jacket for heating and cooling
- baskets for basic filtering, sedimentation, classifying and clearing tests

**Key benefits:**
- flexible adaptation for difficult to filter products
- complete discharge of filter cake
- gentle discharge, no particle damage
- high washing and extraction performance
- easy to assemble
- effective system for removal of filter bag
- robust and easy system for removable border ring

**Key benefits:**
- optimized application for small through large throughputs
- minimal residual moisture
- maximum reduction of chloride concentrations through optimized wash process
- available in stainless steel or rubber coated
Special Applications

**Sterile Top Discharge Sedimentation Centrifuges**
V 630 – 1000 TS
- 1.10 – 1.60 m² sedimentation area
- 100 – 250 L nominal volume

**Key benefits:**
- Meets highest cGMP standards
- Fully automated and validated CIP cleaning
- High G-force
- Cleanroom installation

**Classifying Centrifuges**
630 BK II/III
- 0.78 – 0.99 m² sedimentation area
- 3.75 – 38 L nominal volume
- Titanium Dioxide production

**Key benefits:**
- Precise separation cut
- Easy adjustment of separation cut
- High throughputs
- Recycling of coarse particles
- Simple to install
- Low maintenance, maintenance-friendly design
- TiO₂ production, Al₂O₃, SiC, CaCO₃, etc.

**Vertical Dip Coating Centrifuges**
V 425 TT
- 0.20 m² filter area
- 20 L nominal volume

**Key benefits:**
- Economical coating of small parts with oil, lacquer, adhesive coatings etc.
- Optimized spinning off of excess coating material
- Simple to install

**Vertical Multi-purpose Centrifuges**
V 300 – 700 TM
- 0.06 – 0.66 m² filter area
- 10 – 150 L nominal volume

**Key benefits:**
- Economical solution for recovering liquids and oils
- Easy “plug and use” installation
- Simple, robust design

**Vertical Pusher Centrifuges**
V 600 – 1100 P
- 0.4 – 10 long ton/h capacity

**Key benefits:**
- Recovery of liquids and oils from chips produced by processing centers and from plastic pellets
- Simple, robust design

**Ball Segment Valve**
BSV 150 – BSV 400
- DN 150 – 400 nominal diameter

**Key benefits:**
- CGMP and FDA compliant design
- Inflatable seal with large seal area; seal available in various materials
- Complete, unobstructed discharge
- Cavity-free aseptic design
- Automated, verifiable CIP cleaning
Services

Rebuilt Machines

Key benefits:
– international procurement
– machines from all manufacturers, assembled to suit customer requirements
– constantly changing range
– fast availability
– warranty as for a new machine
– attractive prices

Conversions/Retrofits

Key benefits:
– full mechanical overhaul
– electronic assembly upgrades
– current explosion protection regulations taken into account
– updated documentation

Drive Systems/Controls

Key benefits:
– safety checked
– modular and flexible
– standalone, or can be integrated into any DCS
– GAMP, ATEX, 21 CFR Part II, EN 12547
– remote maintenance and systems analysis
– premium component suppliers
– overall development in-house at HEINKEL

After Sales Services:
• Technical support
• Online support
• Installation and commissioning
• Preventative maintenance
• Maintenance contracts
• Spare parts logistics
• Overhauls and upgrades
• Consulting
• Training
• Rental machines
• Pilot units

HEINKEL Drying and Separation Group products are used to manufacture the following products:

• Agricultural chemicals
• API (active pharmaceutical ingredients)
• Aromatic substances
• Biocides
• Cellulose derivatives
• Fragrant substances
• Precious metals
• Effective pigments
• Electrochemical
• Color pigments
• Fine chemicals
• Herbicides
• Catalysts
• Corrosion inhibitors
• Cosmetics
• Food additives and food substances
• Metallic powder
• Nitrocellulose
• Brighteners
• Pesticides
• Plant extractives
• Pharmaceutical substances
• Preliminary pharmaceutical substances
• Intermediate pharmaceutical products
• Photographic chemicals
• Specialty polymers
• Vitamins